THE GENESEE FARMER.

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THE GENESEE FARMER.

SATURDAY, AUGUST 25, 1838.

"PRATT'S STUMP EXTRACTOR."—Our friend who made the enquiry in relation to this machine, is informed that the right for a state, or any information respecting it, may be obtained by addressing J. R. DRAKE, Esq., Owego, Tioga Co., N. Y.

☞ A commuication from our friend BEMENT, of Albany, has been several weeks waiting for the wood cut he was to have sent us. If the cut has been sent and lost, we will have another made.

☞ The communication from New York, in relation to Mr. Whitmarsh's Mulberries is inadmissible. The name attached to the private note is unknown to us; and is, we presume, fictitious.

Sheep --Electoral Saxony, &c.

We invite the attention of farmers generally, and our wool growing friends especially, to the sale of valuable sheep notified in the advertising columns of our paper. Perhaps there has never been a lot of sheep, better deserving the attention of those interested in the production of *fine wools*, offered in this country than the Rams and Ewes to be sold by Mr. H. D. GROVE. The experience of manufacturers both in Europe and in this country, has demonstrated, that the best cloths can only be produced from the best Saxony wool, and that of this wool, the kind termed by the growers, Electoral Saxony, (of which class are Mr. Grove's sheep,) is superior to all others. This superiority arises from two causes,—the greater fineness of the fibre of the wool, and its adaptation, from the structure of the fibre, to felting. The prices which wool of this quality obtains when compared with other fine, or merino wools, and which may be seen in the tables we have lately given in the Gen. Far., will be conclusive as to the greater value of this wool for manufacturing purposes; and as we in this country produce but a very small part of this quality of wool required for our own consumption, it seems plain that such wool will not be so likely to deteriorate in value, as the kinds that can more easily be grown. Mr. Grove's reputation, as a sheep and wool grower, and the price which his wool commands in market, is a sufficient guarantee of the genuineness of the stock from which they have descended, and the care and skill with which they have been preserved pure and unmixed with inferior races.

We would also invite the notice of those, who, in raising sheep, are more interested in the mutton than the fleece, to the notices of Bakewell or Leicestershire sheep for sale by Mr. Weddle, of Ontario Co. and Mr. Cowlen, of Truxton, Onondaga Co. That raising of sheep for the sake of the mutton they afford, is yearly becoming an object of greater consequence none can deny; and of those breeds of sheep desirable for this purpose none have obtained a reputation equal to the Leicester. As is to be expected, sheep of such constitutions and large bodies cannot be supposed to produce wool of a fine quality, but this defect is in a great part compensated by the greater quanty grown from a given number of sheep. To show what prime sheep of this breed will do, we give Mr. Dunn's statement of the weight of fleece from 10 yearling rams.

2	yearlings,	22 pounds.
3	do	42 do
4	do	36½ do
10		100½

This was the shearing of 1837; some have greatly exceeded this, where single sheep have been taken; but an average of 10 lbs. per head for yearlings must be considered a good yield. Whole flocks have produced from six to eight pounds per head.

We are convinced that where *wool* is the object aimed at, the higher the quality of the fleece the better. Such sheep require more care than the common or imported coarse wool varieties; but the experience of such farmers as L. A. M. and Mr. Grove, is conclusive that most of the complaints that we hear of tenderness of constitution and difficulty of wintering, originate more in the want of skilfulness and care in the farmer, than in the defective constitution of the sheep.

Where, however, the flocks must be small, or the farmer is unprovided with the proper shelters, or circumstances render mutton a greater object than fleece, the sheep with heavier bodies, but with inferior fleeces, may well be preferred. And it always affords us pleasure to give publicity to the efforts of public spirited gentlemen in any part of our country who are engaged in the laudable undertaking of improving our flocks and herds, by placing the best breeds of animals within the reach of the common farmer.

Squashes Turning to Pumpkins.

Mr. Buckingham, the able editor of the Boston Courier, appears to appreciate the importance of the agricultural interest to the prosperity of the country, and devotes a column or two of his journal weekly to the dissemination of information on this topic. Besides evincing much skill in his selections, he gives some original papers of value. In a late number of his paper is a communication signed 'Ruricola,' who requests an explanation of the fact that squashes do sometimes change to pumpkins, or rather that squash seeds will when planted produce pumpkins. Ruricola selected his squash himself, took out the seeds, and planted them; they grew freely, and when he was expecting a feast of this excellent viand, he found they had been metamorphosed into pumpkins. Ruricola asks if this is any thing new under the sun? and requests Mr. Buckingham to explain 'this singular freak of nature.

Mr Buckingham in reply makes in part the following remarks:—"We would observe however, that it is not an unvarying law of the vegetable kingdom, that like ever does, and ever will produce the like. It is a well known fact, that the seed of apples, pears, peaches, and other fruits, seldom, (perhaps not once in a hundred times,) produce fruit like that of the parent tree. But perhaps our correspondent will say that these are not parallel cases, and to make them so, we should cite one in which the seed of an apple should produce a pear, or that of the peach a plum. We will not attempt to remove this difficulty. It is beyond the reach of our knowledge. And we submit it to those whose better experience, and deeper research into the mysterious laws of vegetation qualify them to unravel and explain the same."

Without any pretention to 'better experience' or 'deeper research' than Ruricola or Mr. Buckingham, we think the matter can be explained very easily; and we give what we conceive such explanation, the more readily, as the transmutation of squashes into pumpkins, a well known fact, has by many been considered a proof that wheat could be changed to chess, an event which we think never has been, and probably never will be, proved.

To make the matter plain we may remark that botanists divide all plants into species, and these into varieties. Of the species we may give as examples the cucumber, (*cucumis,*)and the squash, (*cucurbitis.*) Of the first there are several varieties, as is known to every gardener, and that these varieties will intermix by the seed is also well understood. The squash is another species of plant, with numerous varieties also, among which we may enumerate the *lagenaria*, or gourd; the *ovifera*, or egg squash; the *verrucosa*, or club squash; the *citrullus*, or watermelon; and the *pepo*, or pumpkin. The muskmelon belongs to the *cucumis*, or family of cucumbers.

Now it is well known to the naturalist that while *varieties* will intermix by their seeds, a result caused by the impregnation being performed by pollen from another variety of the same species, *species* never do this; but that while all the varieties of the squash, if planted in the vicinity of each other, are liable to have their seeds affected in this way, so that no certainty can be placed on their producing plants precisely like the parent, there is no danger of change in the cucumber or muskmelon from being planted in the vicinity of any variety of the squash. In the varieties of the squash, therefore, great care is necessary to keep the kinds distinct, or prevent, in the way assigned, their intermixing with and degeneratiug each other. The probability is, that the squash from which Ruricola took his seed was impregnated by pollen from the flowers of pumpkins in the vicinity, and hence the fruit was of course a hybrid, or one in which the pumpkin nearly or entirely predominated. To preserve seed like the parent plant, in the squash or cucumber species, it is found best to save the fruit that grows nearest the root; as in this case the male and female flowers, or those that produce fruit and those that do not, are brought into immediate contact, and the impregnation more likely to be performed with pollen from the same plant, than with that from abroad. Thus we see that the changing of squashes to pumpkins, or vice versa, belongs to the natural order of events, and is nothing new under the sun.

The same rules that regulate the impregnation and production of the cucumis and cucurbitis, will apply to the plants *triticum* and *bromus*, or wheat and chess. Experience shows that an endless variety of shades can be produced by sowing different varieties of wheat in the same field, or so that the pollen can intermix freely with the different flowers, the product however as we believe being some variety of wheat, and never chess or any of its varieties. We have never met with any evidence that the muskmelon has changed to the watermelon, or the cocoanut squash to the cucumber, though frequently planted in the vicinity of each other; the changes are confined to the varieties, and rarely or never reach the species. The remark, therefore, of Mr. Buckingham, that in the vegetable kingdom like does not always produce like, is correct if restricted to varieties, but incorrect if extended to species.

CULTIVATION OF MADDER.

The importance to the American farmer of extending his cultivation so as to embrace every article of essential or vital interest to the country, which can be profitably grown here, is daily becoming more apparent. Considerations of public policy, as well as patriotism, would lead to such a result; and the avowed end of all systems of political economy—independence as far as practicable—would seem to render such a course, a duty. That madder can be grown here of the very best quality does not admit of a doubt; and experiments show that it is one of the most profitable investments which can be made of land. Holland or Turkey, by long practice, may exceed us in the preparation of the root when grown, and therefore be able, in the very finest sorts of their madders, to produce an article superior to ours; but this is a difficulty which further experience will obviate, and as to the quantity and quality of the roots grown, competent judges assert that our crops are inferior to none in the world.

The great and continued extension of the use of this article for dyeing, would seem to preclude the idea that the supply will be likely to exceed the demand; and active preparations are making in most foreign countries suitable to its culture to extend its growth. In a late number of the "La Bourse," a Parisian journal devoted to subjects connected with French industry and commerce, is a paper on the formation of societies for the cultivation of Madder, associations which cannot, it is thought, be otherwise than advantageous. From a translation of this paper we make the following extract.

"We know that there will always be a demand for madder; its use in the arts of dyeing is constantly receiving new extensions. New channels are constantly opening for

quick and easy sales. Experiments are making by Messrs. Colin, Robiquet, and Lagier, with their preparations of Madder, which seem to indicate, that *madder may be made to serve in dyeing* SILKS, as it already serves for calicoes, cloths and woolen stuffs. That would be an important conquest in the arts. The prodigious increase of the use of cotton in manufactures; the improvements in the art of dyeing with madder upon wool; the perfecting of madder varnishes, (Laques de Garance) and their employment for paper hangings, &c., the new preparations of Messrs. Robiquet, Colin, and Lagier, all tend to establish the position, that madder is yet very far from having acquired the immense development of which it is susceptible."

In a valuable paper on madder in the July No. of the Journal of the American Institute, at New York, is an account of the manner in which Dutch madder is prepared and assorted, for sale.

"Dutch madder is never exported except in a prepared or manufactured state. It is divided by commercial men into four qualities, distinguished by the names of *mull*, *gamene*, *ombro*, and *crops*. The roots being dried in stoves, the first species or *mull*, consists of a powder formed by pounding the very small roots, and the husk or bark of the larger ones; it is comparatively low priced, and is employed in dyeing cheap dark colors. A second pounding seperates about a third part of the larger roots, and this being sifted and packed separately, is sold in England under the name of GAMENE or *gameens*. The third and last pounding comprehends the interior, pure and bright part of the roots, and is sold in Holland under the name of "*Kor Xrops*," but is here simply denominated Crops. Sometimes, however, after the *mull* has been separated, the entire residue is ground, sifted, and packed together under the name of Ombro. Such madder consists of about one third of *gamene* and two thirds of *crops*. Prepared madder should be kept perfectly dry. If exposed, it attracts the moisture of the atmosphere, and is injured by it."

M'Culloch, in his Dictionary of Commerce, asserts 'that the cultivation of Madder in England has been attempted but without success;' the average moderate temperature and moist climate, appearing not to favor the development of the coloring matter of the root. Vast quantities of it are used in the manufactories of that kingdom, and it is brought from Zealand, France, Turkey, and in short from wherever it can be found. It has been found by experiment in France, that in soils containing quantities of alkali, such as those from some kinds of decomposed feldspar, or which have been heavily manured with heated ashes, the root is of a red color, while on other soils the root is yellow.

Madder requires a deep rich soil, a loamy one is preferred, and one that can easily be kept free from weeds, and easily stirred. This is necessary as the roots remain in the ground three years, and require freqent manipulations with the hoe, in order to produce a great crop and one of good quality. For information respecting the best method of cultivation in this country; the expenses and the profits per acre of an average crop; we must refer the reader to the former volumes of the Farmer, particularly the last in which these several items are detailed by a experienced cultivator. We think that madder might be made an important staple in our country; and where the soil and the climate are clearly favorable to the production of an article of the first quality, and that of one for which there is and must be a continually increasing demand, there could be no possible risque on a suitable soil, and with the necessary information to engage in the culutre.

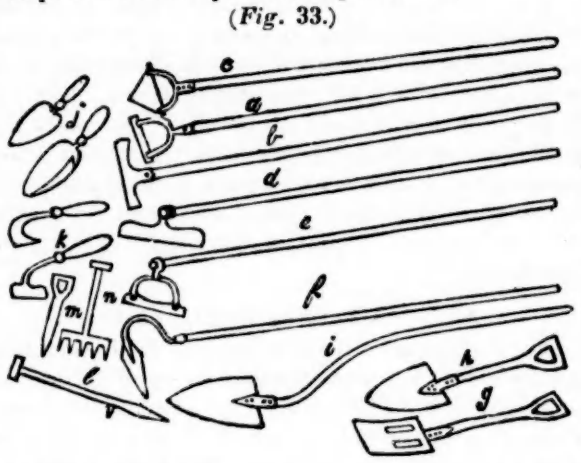
Gardening and Farming Implements.

While so much attention is very properly devoted to *machines*, the simple implements required for daily use are neglected. The more frequently a tool is used, the greater should be the care that it be perfectly adapted to its purpose; and the simpler and cheaper its construction, the more easily may this be effected. Most cultivators would erroneously prefer a hoe costing but half a dollar to one costing two dollars, but with which a man might do one third more work in the day; yet the latter would in a month's time, pay for its additional price many times over. An error is very commonly committed by causing the same tool to perform many different sorts of work; for instance, the common broad hoe is used for working in fresh ploughed land and in a wady turf-among stones and in soft mellow sand-for cultivating a corn field or for thinning garden crops-for the purposes of a spade, a shovel,a dibber, or a drill rake. It is true, when a tool is needed but once a year and then but for a few minutes, it is hardly necessary that one specially for the purpose be provided; a workman should be able in rare instances, using the words of Dr. Franklin, to bore a hole with his knife or saw with a gimblet. But in common cases, economy will direct that the very best and most convenient tools be provided, though they may seem costly.

In cutting weeds with a hoe, there is frequently a great and unnecessary expenditure of strength by using a dull instrument; except the ground be stony, every hoe for such purposes should be daily ground sharp.

It will perhaps not be unacceptable to our readers, to furnish a few simple figures of such implements as have been found useful. Others, improvements on these, may perhaps be furnished by our correspondents.

(*Fig.* 33.)



In Fig. 33, *a*, *b*, and *c*, represent the *thrust-hoe* which consists of a plate of steel attached to a handle in such a manner that when the handle is held in an inclined position with one end resting upon the ground, the plate may be nearly flat, and in this position it is pushed forward by the hand. This kind of hoe is only used for cutting weeds, in alleys, and other smooth pieces of ground. Less labor and a less stooping position is required in using it than the common or draw-hoe, when weeds are small. The triangular form represented by fig. *c*, is less easily checked by obstructions, and is consequently better adapted for a larger growth of weeds.

The common or *draw-hoe*, instead of being thrust forward is drawn towards the operator. The blade is either broad, for drawing mellow earth, as in the common broad hoe; long and narrow as in figs. *d*, and *e*, for cutting weeds and working in closely planted crops; or deep and strong for hard soils and deep working. The Spanish hoe, fig. *f*, is well adapted to loosening hard soils, and stirring the ground among plants.

Perforated spades, fig. *g*, are sometimes useful in adhesive soils, as freeing themselves more readily from earth. *Pointed spades*, fig. *h*, penetrate hard soils, much more easily than the common square edged spades. The curved-handle shovel, represented by fig. *i*, is very valuable in throwing out loose earth from trenches, pits, &c.—The curved part is held by the right hand and supported by the knee, and in this position the shovel is thrust forward horizontally under the earth. Its chief advantages are, ease to the workman, and the smooth and level surface left by it when used.

Garden trowels, fig. *j*, are either flat, curved up at the edges, or semi-cylindrical. The curved are most commonly recommended, but the flat are much superior for most gardening work, as they free themselves more readily from the soil. The curved and semi-cylindrical are the best for taking up plants for transplanting.

Weeding tools, fig. *k*, consist of hooked blades, either wide or narrow according to the work, and a small handle for one hand. They are useful in weeding among small garden crops, being more expeditious than pulling weeds by the finger. The Spanish hoe (fig. *f*,) when made small, with a short handle, is very useful in stirring the soil.

Dibbers, figs. *l*, *m*, and *n*, are pointed pieces of wood, sometimes shod with iron, for making holes in the earth to admit the roots of newly removed plants. When greater force is required for penetrating the soil than can be given by the hand, a projection for the foot, as in fig. *l*, is employed. Dibbers for making several holes, as in fig. *n*, are sometimes used for planting seeds evenly.

J. J. T.

RING BONE.

A subscriber in Romulus, enquires the cause of the ring-bone in horses, and the best means of effecting a cure where a bone is so diseased.

Ringbone is one of the most serious kinds of lameness to which horses are subject; and when fully developed, or the bony deposit has formed, may be considered as incurable. Ringbone, as almost every one acquainted with this valuable animal knows, commences in one of the bones of the foot, or the pasterns, and involves in its progress, not only these bones but the cartilages of the foot. The foot of the horse consists of three bones which lie below the upper pastern, or fetlock joint. The first, or pastern bone, lies between the great and little pastern joints. The second, or coronet bone, is next; and this articulates with the coffin bone, which is of the shape and wholly enclosed by the hoof. The middle one of the three is the bone that appears to be the primary seat of the ring-bone, but when of long duration the bony tumor is found to envelope more or less the bones above and below. It may be produced by either sprains or bruises, or as some have maintained by a hereditary predisposition.

In the valuable work on the Horse, published by the Useful Knowledge Society, it is said, "that in the early stage of the disease, and when recognized only by a bony enlargement on both sides of the pastern joint, or in some few cases on one side only, the lameness is not very considerable, and it is not impossible to remove the disease by active blistering, or by the application of the cau tery; but there is so much wear and tear in this part of the animal, that the inflammation, and the disposition to form bone in most cases spreads too rapidly for cure."

The nature of the disease points out the remedies that may be attended with the most hope of success. Any thing that shall produce severe irritation and copious discharge from the surface above the tumor, or directly from it, will have a tendency to prevent its spread or increase. All powerful stimulants, such as turpentine, oil of origanum, oil of spike, all blistering and caustic applications, and even the use of the red hot iron, or firing as it is sometimes called, have been found useful according to the stage and state of the disease. A preparation made by enclosing a quantity of the common earth or angle-worm in a glass bottle, and hanging it in the sun, or in any place of high temperature for a few days, or until the worms undergo decomposition and become a kind of oil, has been highly recommended in the first or earlier stages of the ring-bone; and from the exceeding pungent and penetrating nature of the application, it is probable might be productive of benefit in preventing the formation of bone.

In the Farmer's Cabinet, for last January, is a receipt furnished by a subscriber, who calls himself 'A German,' which he pronounces an 'effectual remedy.' We have no positive knowledge of its efficiency; but setting aside he absurd notion of the connexion of the cure with the phases of the moon, the prescription, by exciting great external irritation, would appear likely to operate favorably.

"Directions. Bake a cake of chopped rye, about an inch and a half thick, and of length and breadth sufficient to cover the ring-bone. Moisten the ring-bone completely with aquifortis of the best quality, (this may be done with a feather,) and then rub it over with hog's lard. Take the cake as hot as can be handled, split it in two, and pour a little of the aquifortis on the inner side of one of the halves, and tie it on while hot, with the inner side on the lump. Let this remain on for about twelve hours, and when taken off, rub it over again with the hog's lard. It will be necessary while the application is on the foot, that the horse be tied up to prevent him from biting it off.—The first application to be made on the first day of the last quarter of the moon, and repeated every other day till three applications are made. This seldom fails of effecting a cure, but if necessary to repeat it again, let it be done at the succeeding last quarter."

Blaine, for the bone spavin, recommends the place affected by the deposit of bone to be rubbed energetically night and morning for five or six days with a drachm of

mercurial ointment; after which to apply a blister, and at the end of a fortnight or three weeks to apply another. In very bad cases he uses the actual cautery. As the ring-bone, in his estimation, arises from the same cause, being an exostosis of bony matter around the coronet instead of the hock bone as in the former case, so the treatment recommended is the same.

In all these cases the great object aimed at is external irritation and a copious discharge from the vicinity of the tumor; and the more effectually this can be accomplished, and the earlier the disease is attacked, the more probable is the accomplishment of a cure.

WEEDS.

The astonishing increase of weeds,—and by this name we mean all noxious plants that infest soils, especially cultivated ones,—such as the thistle, redroot, charlic, Johnswort, daisy, and a multitude of others with which our farmers are but too well acquainted, would seem to demand that more attention should be paid to the best methods of exterminating them, or at least preventing their increase, before the cultivation of our richest fields becomes impossible or unprofitable.

Many weeds spread rapidly by the root, as the thistle, Johnswort, &c., others are propagated only by seeds, as the redroot and charlic; but, as there is scarce a plant that cannot be propagated by the seeds, and those first named it is evident spread extensively that way as well as by the roots, it is clear the preventing the formation and ripening of seed should be the first object with the farmer, to prevent their being scattered by sowing, or by the spreading of manures, the second thing to be aimed at.

Farmers who allow the weeds named, or indeed any others, to ripen and distribute their seed unmolested, are preparing a rich harvest of losses in the actual value of their farms, and of toil and trouble in their management; and those who sow, or allow to be sown on their farms, seed of any kind containing these pestiferous germs—we say nothing here of those who knowingly dispose of them, as the conscience of a man who would spread his neighbor's fields with the thistle, steinerout, or charlic must be proof against all ordinary appeals to a moral sense—must we think entirely overlook the fearful consequences, if not to themselves, to their posterity. There are many farms within our knowledge the profits of which are already most materially lessened from the operation of these causes, and the evil instead of diminishing is yearly increasing.

In the cultivation of grain, to which so much of our country is, and must be devoted, the farmer is exposed to this increasing evil in at least three different ways to which the owner of a grazing farm is not liable; first from ploughing in seed scattered by the winds or the birds; second, from that mixed with the grain or grass seeds sown by him; and thirdly, from that carried from the yard in manures and spread upon the soil; and it is unquestionably owing to this last cause that we witness such a rapid spread of some of these weeds on cultivated land. The foul stuff grown with the hay or grain, principally the latter, ripens its seeds in the field, is carted to the stack or the barn, fed out or threshed out and thrown into the yard, the seeds lie unhurt in the manure preparing for vegetation until carted upon the ploughed fieldsfor fallow or spring crops, and ready to spring with vigor the moment they come in contract with the earth. The weeds may in a great measure be prevented by proper precautions from ripening their seeds in the fields; the grain or grass seeds sown may be, and should be, thoroughly cleaned or never put into the earth; but if the bad seeds get into the manure, there is scarcely a possibility that they will not spread as far, and into as many fields, as the manure is carried.

We are the advocates of the application of long manure, unless some pressing reason forbids. It clearly affords greater nourishment to crops than if allowed to ferment and rot above the surface, and, therefore, where circumstances admit should always be ploughed under, to undergo the process of decomposition. But we are also prepared to forego part of these advantages, if they cannot be secured, (and where foul stuff has been grown in the hay or straw that constitutes the principal part of long manure, we are confident they cannot,) without running the great risque, or encountering the absolute certainty of stocking our fields with the justly dreaded weeds. In this case the gain from the unrotted manure, is far more than counterbalanced by the loss on the crop occasioned by the presence of the weeds; to say nothing of the more serious injury resulting from their obtaining a foothold in our fields yet free from them, an injury which half a dozen ordinary crops would hardly compensate.—It, therefore, seems plain that a method that shall destroy the seeds in the dung, before it shall be applied to the soil must eventually be preferable to one that leaves them free to vegetate, even should some part of its efficiency be lost in the process.

This destruction of all seeds in manure can be effected by the great heat produced in dung by fermentation, when that process is conducted under circumstances favorable to its development; and to do this it is only necessary that the decomposition of the manure should be carried on in piles. It is well known that the degree of heat produced in an ordinary hot-bed, in which the manure is not disturbed, would become destructive to all vegetation were the seeds planted upon it while the fermentation was most active, or the heat not mitigated, and that it actually is so to all seeds that are in the manure when placed in the bed. So certain is this effect, that some have deemed it cheaper in the end, to be at the expense of constructing hot-beds, for the sake of the manure, rather than to use common barnyard manure with its infinity of seeds on the garden. All manure ferments in decomposition, and consequently heats more or less; but it is only when made into piles, that the heat is sufficient to destroy the vitality of the seeds it may contain. If, therefore, farmers would adopt the practice generally of heaping their manure either in the yard, or the field, and allowing the heat to rise and remain sufficiently long to destroy the seeds of weeds, &c., that might be in it, they would be certain of being freed from one of the most prominent causes of the propagation of worthless plants. If the heaps were formed of alternate layers of vegetable mold, or swamp mud, and manure, the mold or mud would absorb much of the fertilizing gases that without such precautions will escape during the fermentation, and the whole mass be rendered more valuable than without such mixture.

It is true the system here recommended would add something at first to the labor necessary on the farm; but when the work required for keeping down weeds in the field, or the garden, or separating foul seeds from grain, is taken into consideration, a very great saving in labor would undoubtly be effected, independent of the pleasure in working a farm, and the additional value given to a farm, free from the nuisances to which we have alluded. The only precaution that would seem necessary in this preparation of manure would be to occasionally examine the heap of dung or compost, and if the heat was like to be so great as to injure the mass to open it to the air a little; and if on the contrary the fermentation should not be brisk enough to add a little water to the pile, or what would be still better, from the yard as that always contains a large quantity of salts in solution, and would prove an effective as well as valuable agent in the process. Our farms are too valuable to be surrendered to the dominion of these weeds without an effort to check or destroy them. The weeding system as practiced in England to keep their grain and farms clean cannot be adopted here where labor is so high; but we can endeavor to prevent these weeds going to seed, and we can prevent their extension in the manure by destroying their germination; and there is no one who knows the loss they would occasion, but will admit the object is at least worth an effort.

SOWING WHEAT.

Contrary to the usual course of things in Great Britain, the last winter was so unusually severe, that much of the wheat was frozen out and killed; and it was for a time feared that the crop would be reduced one third or one half. The fine wheat weather of May and June had, however, mostly dissipated these fears, though it was expected that heavy straw, and inferior grain would most likely be the result of such a rapid growth. The killing out of the wheat had awakened inquiry as to the best methods of avoiding such an event; and an investigation of the causes which had led to the destruction of wheat in one field, while in the adjoining one the plants mostly escaped, had been actively going on among the farmers. The general conclusion from the facts seems to be that the fields in which the seed was put in deep, either by the drill or by the plough, have resisted the frost far better than those in which the seed was put in shallow or merely covered by the harow, as is the common practice in our country. The following extract from a paper in the British Farm. Mag., by Mr. Hillyard, one of the most thorough farmers in England, will show his opinion on the subject. As one of the most serious obstacles to the growth of wheat in many parts of our country is its freezing out, it might be well for our farmers in such sections to make a few experiments in putting in their wheat the coming fall, deep, or otherwise, and mark the result.

"All my wheat was *drilled in four inches deep:* had others put theirs in the same depth, I feel assured there would not now have been so many defective crops; and I will now state one circumstance that may induce others to be of my opinion. At the end of one of the bouts of my drilling machine, the guider of it discovered that he had gone many yards with so little seed in it, that some of the pipes had not sown; where they had not, drills were made with a hoe, and seeds was put in; but from its not being put in above half the depth of the other, the grain which came up has disappeared." He adds, if the weather should prove favorable in June and July, "I shall very likely have abundance of straw, with a short quantity of an inferior quality of grain. I regret having this year omitted my usual practice of eating my wheat crops off early in the spring with sheep, to prevent having a superabundance of straw."

GREAT CROP OF OATS.

It will be seen by a communication in this paper, that our correspondent, *A Livingston Co. Farmer*, raised the last year nine hundred bushels of oats on nine acres of land. The land had been many years under the plough, and without manure. The Genesee Flatts have, we believe, produced the largest wheat crop on record, (68 43.60ths bushels per acre,) and we shall be glad to hear where a greater crop of oats than the one here recorded has been raised.

Deep Ploughing---Treading in Seed.

We gather the following facts, which should not be lost to our readers, and which are in accordance with the teachings of science, from the proceedings of the Rutland (England) Agricultural Association, as published in the Farmers' Magazine.

On Mr. Barker's health being given from the chair, this gentleman returned thanks, stated the great improvement in ploughing, which had resulted from the distribution of premiums, at ploughing matches, and which had amounted to £40, and after referring to other local improvements, he proceeded to say—

"I will detail to you an experiment, which I made last year in deep ploughing. I felt at first inclined to try the press, but some said try the drill, some the broadcast, and at last I selected the drill, and had the seed trodden in by my Lord Lordsdale's horses, when they were at exercise, and afterwards had a flock of 400 or 500 sheep driven over it. The produce of this land averaged seven quarters (56 bushels) and one peck an acre throughout 22 acres—(the total product amounting to £402 3*s.* 9*d.* (= to $1,785, or $81 the acre,) and from two bushels and one peck of seed per acre sown; and I wish you would try the experiment of treading in the wheat, or fixing it firmly in the ground, which I am sure will lead to a similar result. As regards the exhibition of animals, I think we are still wrong in principle, and in endeavoring to produce so much fat If we paid greater attention to the increase of *eatable flesh*, I am certain a great improvement might be effected, especially in the quality of Leicestershire sheep and pigs. When our prize animals are killed, what do we find? Why perhaps five or six inches of fat to one of lean, I intend, another year, to offer a premium for that animal which, when dead, shall show the most *lean*, and I hope that some one will offer a similar pig premium. I must beg you to take my hints about fat and lean into consideration, and see whether we cannot produce a greater quantity of *eatable meat* than we have hitherto done."

SINGULAR. The Charlottesville, (Va.) Advocate states that a Ewe in that county produced last spring a fine *hybridous* lamb, bearing strong resemblance to a *fawn*. The ewe ran in the woods last fall where deer abound. The little *deer lamb* is said to be very beautiful and sprightly.

COMMUNICATIONS.

Treatment of Wounds on Horses.

Mr. Tucker—In the 5th number of the current volume of the Monthly Farmer, I noticed some remarks upon the "Treatment of wounds on Horses," and although the treatment there recommended, would, undoubtedly, under certain circumstances, prove highly beneficial, yet, as that article seems to direct it as generally applicable in every case, and in every condition of wounds, while in many, and indeed in most cases, it could not fail to prove injurious, I beg leave to offer for your consideration, a few observations upon the same subject.

It is truly painful to see an animal possessing such claims to our kindness and care, as the horse, so often subjected to empirical and cruel treatment, when laboring under disease. This arises from the prescription not being directed by any rational physiological and pathological principles; every one feeling at liberty to prescribe whatever remedy he may have heard of, or can invent, and the more bold and novel, the greater the merit of suggesting it. Attention to a few well established principles, would prevent the fatal errors into which many are unwarily led, and preserve many a noble and valuable animal from ruin.

Experience has abundantly proved that those general principles of physiology and pathology, which are applicable to the human subject in health and in disease, are also applicable to those animals that are taken from the hand of nature, and submitted to our care and nurture, and that similar diseases require in both, similar treatment. The principles, therefore, that would guide a skillful surgeon in the treatment of a surgical disease in man, should also direct the veterinary surgeon or farrier, in similar diseases in a horse, or other animal. In relation to this subject, the surgeon may well adopt, as his motto, lines that are perfectly adapted to every other, of which your paper professes to treat.

"Take Nature's path and mad opinions leave."

The two processes by which nature accomplishes the healing of wounds, are, 1st, Union by the first intention, as it is technically called, or in other words, the union of the divided parts immediately, without the formation of matter; and 2nd, by granulation, in which the immediate union of the parts is not effected; but by accident or improper interference, are kept asunder, and the chasm has to be filled up, by the formation of new flesh. By the first process the cure is soon accomplished, with little trouble, with little or no pain, and little risk of leaving an unsightly scar. By the second, the cure is often protracted, interrupted in its progress, and more liable to leave a permanent disfigurement.

The principles by which the one or the other of these results is produced, are these; 1st, If the sides of a recent wound, made by a cutting instrument, be simply brought into perfect contact, and retained there from three to five days, a perfect union will take place, without the formation of matter. 2nd, If the divided parts cannot be brought into perfect contact, or before contact have been irritated by improper applications, immediate union will not take place, but matter must be formed, new flesh must be interposed to connect the parts, and subsequently be removed by the slow progress of absorption, to accomplish the same ultimate object. The first process is nature's own spontaneous effort to effect a cure, and the course which she would always pursue under favourable circumstances, if left to herself, or gently and judiciously aided by art.—The second, is that to which she resorts from necessity, and when interrupted in her salutary process, by the rude and ill-timed interference of art—the first result therefore, should always be aimed at, as not only the most favorable, but also as attended by the least risk and trouble. To attain which, the principles just referred to, dictate the following course.

As nearly as may be, free the wound from all foreign substances, as dirt, gravel, hair, &c, &c,, in the most gentle manner, by means of a soft sponge and simple warm water, then bring the sides of the wound into perfect contact, if possible, and retain them there by means of adhesive plaster, or stitches, or both, according to circumstances, and over the whole, apply a pledget of soft lint, which should remain until the cure is effected. Nothing more is required, unless inflammation should run too high, when keeping the parts constantly wet in *cold water* is the best application. Indeed, the numerous cleansing and healing nostrums so frequently resorted to, never fail of being hurtful by disturbing the salutary operations of nature.

With this mild and simple treatment, nature always produces that degree of inflamation which is necessary to effect a cure, in the best possible manner; but by the officious application of plasters, blue stone, detergent oils, &c. &c., her salutary operations are disturbed, too much inflammation is excited, and she is compelled to resort to the slower, more laborious, and imperfect process, of healing by granulation. D—.

Sackets Harbor, Aug. 15, 1838.

Great Crop of Oats.

Mr. Tucker—In your August number of the Monthly Genesee Farmer, I see that Mr. Jonah A. Hulbert, raised 91 bushels of oats to the acre. This looks well for old Berkshire county; but to show our sister state of Massachusetts, that the county of Livingston has done a little more, I will give you the product of nine acres of Flatts on the Genesee river. Last year I sowed nine acres of Flatts with oats, one half of the side or Tartarian oats, and the other half of the common oats, mixed when sowed; and I took off from this nine acres, Nine Hundred Bushels of oats, well cleaned, and all of the first quality, which you see is 100 bushels to the acre, and nine bushels to the acre more than Mr. Hulbert had.

Yours in haste,

A Livingston County Farmer.

August 23d, 1838.

Early Variety of Corn.

Mr. Tucker—When on a visit to some friends in Le Roy, last winter, I was shown some corn raised by Mr. Morgan near that village, which was recommended as the *earliest* variety known in this region, and moreover as very productive. I procured a few quarts and planted about half an acre on the 23*d of May;* and now send you a specimen plucked from the stalks this morning. It is different from the common white flint,—considerably earlier, and more productive than the small Canada. It is small stalked, and will admit of being planted in rows two feet asunder and 18 inches in the row. I am satisfied it is a most valuable variety, as a sure and productive crop in our short and uncertain seasons, and shall endeavor to distribute in small quantities for seed, what I may have to spare. Yours, R.

Gates, August 22*d*, 1838.

The specimen of corn, received with the above, may be seen at this office. It is a very handsome, large kerneled 8 rowed variety, and is now ripe enough to cut up. The seed is said to have been originally brought from Vermont.

A SINGULAR BIRD.

Plutarch says, in his life of Artaxerxes, that Parysatis, the mother of that king, who was a woman, as might well be supposed, possessed of the most savage and and implacable temper, determined upon taking the life of Statira the Queen; fearing that the love and regard which the King had for his wife, would have a tendency to undermine the power and influence which she then exercised over him. She saw that her own power with the king depended only on his reverence for her, as his mother; whereas that of Statira was founded in love, and confirmed by the greatest confidence in her fidelity. It seems that these two princesses were very suspicious of each other, so much so, that they would not eat at the same table, unless it were from the same dish, and even of the same slice. On account, therefore, of the wary conduct of Statira, Parysatis was at her wits end to devise a stratagem wherewith to effect her diabolical design. She finally, however, as Plutarch tells us, hit upon the following:

"There is a small bird in Persia, *which has no excrements, the intestines being only filled with fat;* on which account, it is supposed to *live upon air and dew:* the name of it is *Rhyntoces.* Parysatis divided one of these birds with a knife that was poisoned on one side, and taking the wholesome part herself, gave the other part to Statira."

I have read, and heard told, many wonderful stories in my life time, and the above is one of them; and my object in sending it to you, is to ascertain whether there is any truth in it. Can you, or any of your correspondents, inform us whether any other historian, save Plutarch, mentions the existence of such a bird? Plutarch, I believe, is generally conceded to be, in the main, a correct historian, and his giving it here without the least qualification, as though it was, in his day, a common known fact, induces me to believe that he did not make the story out of whole cloth. If such a bird ever did exist, I imagine it would be interesting to your ornithological readers to hear more of it. For myself, I should be glad to hear some further particulars of this Persian bird. C.

Height of Water in the Lakes.

A great deal has been written of late, on the subject of the periodical rise of water in the lakes. Let us apply a little *common sense* to the subject. In no country on the face of the earth, can the water of lakes or rivers be increased, unless by some fall of rain in their course, or about the sources of the rivers or their branches. But the lakes are extraordinarily high this season. And has not a *very* extraordinary quantity of rain fallen during the year? I speak of Upper Canada, where such has most assuredly occurred. It is said however that this rise is periodical, once in seven years. If so, this would seem to confirm a theory advanced in Britain, that there is *a revolution of the seasons* every seven years. An ingenious writer attempted, some twenty years since, to establish this theory on philosophical principles. W. C.

Chinguacousy, U. C. July, 1838.

PHENOMENA OF PLANTS,

ARISING FROM CHANGES IN THE ATMOSPHERE.

Plants exhibit some phenomena which are supposed to arise from the state of the atmosphere; accurate observers of nature have made remarks upon these changes in plants, as preceding certain changes of weather. Lord Baeon, who was remarkably attentive to all the appearances and changes of natural objects, is the author of the following observations.

"*Chickweed* (*Anagallis.*) When the flower expands boldly and fully, no rain will happen for four hours or upwards: if it continues in that open state, no rain will disturb the summer's day; when it half conceals its miniature flower, the day is generally showery; but if it entirely shuts up or veils the white flower with its green mantle, let the traveller put on his great coat, and the ploughman, with his beast of draught, expect rest from their labor.

"*Siberian Sowthistle* (*Sonchus.*) If the flowers of this plant keep open all night, rain will certainly fall the next day.

"*Trefoil* (*Hedysarum.*) The different species of trefoil always contract their leaves at the approach of a storm: hence these plants have been termed the Husbandman's Barometer.

"*African Mary-gold.* If this plant opens not its flowers in the morning about seven o'clock, you may be sure it will rain that day unless it thunders.

"*White thorns* and *dog-rose bushes.* Wet summers are generally attended with an uncommon quantity of seed on these shrubs, whence their unusual fruitfulness is a sign of severe winter."

Beside the above, there are several plants, especially those with compound, yellow flowers, which during the whole day, turn their flowers towards the sun, viz. to the east in the morning, to the south at noon, and to the west towards evening, This is very observable in the snow-thistle, *Sonchus arvensis;* and it is a well known fact, that a great part of the plants in a serene sky, expand their flowers, and as it were with cheerful looks behold the light of the sun; and before rain, they shut them up, as the tulip.

The flowers of the chick-wintergreen (*Trientalis*) droop in the night, lest rain or moisture should injure the fertilizing pollen.

One species of *wood-sorrel*, shuts up or doubles its leaves before storms and tempests, but in a serene sky expands or unfolds them, so that husbandmen can foretel tempests from it. It is also well known that the sensitive plants, and *cassia*, observe the same rule.

Besides affording prognostics of wheather, many plants fold themselves up at particular hours, with such regularity as to have acquired names from this property.

The following are among the more remarkable plants of this description.

Goatsbeard. The flowers of both species of *Tragopogon*, open in the morning at the approach of the sun, and without regard to the state of the weather, regularly shut about noon. Hence it is generally known by the name of *go-to-bed-at-noon.*

The *Princesses' leaf* or *four o'clock flower* (*Mirabilis,*) in the Malay Islands, is an elegant shrub, so called by the natives, because their ladies are fond of the grateful odor of its white leaves. It opens its flowers at four in the evening, and does not close them till the same hour returns in the morning. Many people transplant them from the woods into their gardens, and use them as a dial or clock, especially in cloudy weather.

The *Evening Primrose* (*Enothera,*) is well known from its remarkable properties of regularly shutting with a loud popping noise, about sunrise, and opening at sunset. After six o'clock, these flowers regularly report the approach of night.

The *tamarind tree*, the water lily (*Nymphœa,*) the mary-gold, the false sensitive plant, and several others of the Diadelphia class, in serene weather expand their leaves in the day time, and contract them during ths night. According to some botanists, the tamarind tree enfolds within its leaves, the flowers of fruit every night, in order to guard them from cold or rain.

The flower of the garden lettuce, which is in a vertical plane, opens at 7 o'clock, and shuts at ten.

"A species of serpentine aloes, without prickles, whose large and beautiful flower exhales a strong odor of the Vanilla during the time of its expansion, which is very short, is cultivated in the imperial garden of Paris. It does not blossom until towards the month of July, and about fiye o'clock in the evening, at which time it gradually opens its petals, expands them, droops and dies.—By ten o'clock the same night, it is totally withered, to the great astonishment of the spectators, who flock in crowds to see it.

"The *cerces*, a native of Jamaica and Vera Cruz, expands an exquisitely beautiful flower, and emits a highly fragrant odor, for a few hours in the night, and then closes to open no more. The flower is nearly a foot in diameter. the inside of the calyx of a splendid yellow, and the numerous petals are of a pure white. It begins to open about seven or eight o'clock in the evening, and closes before sunrise in the morning.

"The flower of the dandelion possesses very peculiar means of sheltering itself from the heat of the sun, as it closes entirely whenever the heat becomes excessive. It has been observed to open in summer at half an hour after five in the morning, and collect its petals towards the centre about nine o'clock."

Linnæus has enumerated forty-six flowers which possess this kind of sensibility: he divides them into three classes.

1. *Meterioric flowers*, which less accurately observe the hour of folding, but are expanded sooner or later according to the cloudiness, moisture, or pressure of the atmosphere.

2. *Tropical flowers*, that open in the morning, and close before evening every day, but the hour of their expanding becomes earlier or later, as the length of the day increases or decreases.

3. *Equinoctial flowers*, which open at a certain and exact hour of the day, and for the most part close at another determinate hour.—*Lincoln's Botany.*

On Orchard Grass—Manner of Cultivation—securing the seeds—Quantity sown—Season and mode—Causes of failure—Product and value for pasturage and hay—its nutritive qualities, and superiority over timothy, both when green and dry.

BY LOYD JONES, ESQ.

DEAR SIR—I have cultivated orchard grass for five and twenty years. My crops failed from the bad quality of the seeds, until they were secured by myself. When they are in the state at which they can be shaken from the heads, the stems are cut by a skilful cradler just above the tops of the under grass. After some practice, he is enabled to catch with his left hand the portions taken by the cradle, and to place them regularly as he advances. They are immediately bound in sheaves large as a man's leg.—Double swarth are afterwards mown with a naked scythe to remove the under grass, and leave at proper distances throughout the field, openings upon which the sheaves are shocked. They remain in this state from eight to ten days, until sufficiently dry to be carried to the barn, where they are forthwith threshed to guard against heating, the great source of injury to the seeds of this valuable crop. The usual manner of securing them, by putting the sheaves into the mow, is, I am satisfied, the most effectual mode to destroy the principle of vegetation, as they can rarely be so treated without being mow-burned.

After having been threshed, they should be strewed upon the barn floor—occasionally stirred if the quantity be large, during eight or ten days, until they are perfectly dry—without this precaution they would inevitably be heated.

The under grass should all be mown for hay as soon as possible, after the seeds have been harvested. If it be allowed to stand but for a few days, it loses its nutritive properties,—in fact dies, after having lost the heads.—The hay thus made, and properly secured, although necessarily harsh from having been allowed to pass the stage of its growth when most succulent and nutritious, I have found good fodder, for both horses and neat cattle.

The product of seeds varies from ten to twenty bushels per acre. I have had in a very favorable season, twenty bushels upon land which would not have afforded, I think, ten of wheat. The product of this, as of all crops, depends much, of course, upon the season, and the preparation of the land. The crop to which I advert, was purposely grown upon a poor soil, to show the excellence of the plant, and the fallacy of the assertion, that it required very rich land.

I sow from eight to ten quarts of clover seeds, and a bushel of orchard grass seeds per acre in February, upon wheat or rye land. I should prefer their being sown with oats or barley, as the seeds could be covered more regularly with the harrow, and their vegetation would be secured. I do not apprehend injury from frost in early sowing, but I dread the effects of drouth from late. I have never suffered from early, but have generally had cause to regret the evils of late sowing.

I consider orchard grass the best herbage for pasturage upon *upland*—for hay it certainly cannot be excelled.—*Farmers' Cabinet.*

Long Island Agriculture.

We have just met with an intelligent Long Island farmer, and we choose to fasten while it is fresh upon our minds the information he has given us.

He states that leeched ashes are greatly used upon the Island both for wheat and rye; and are as important to the latter crop as the former; that it is usually spread upon the land at the time of sowing the seed at the rate of 90 to 100 bushels per acre; and usually harrowed in; that their crops of rye vary much; of wheat the average is about 20 bushels; and are seldom subject to blight; that winter wheat succeeds much better with them than spring wheat; and that it is all essential to manure their land the same season when the wheat is sowed; and for this purpose stable manure is considered much the most valuable; and that this is applied as brought directly from the stable. Of lime they have made little or no use; but from experiments within his knowledge they are led to a strong belief of its utility. We are entire believers in its utility and always have been; but of its indispensableness in the production of wheat we are not so fully persuaded. He further stated that the ashes were by no means sufficient without manure. This accords with the best doctrines of vegetable nutrition. They are not a manure properly so speaking. They are not the food of plants; but like lime in its various forms are a mere condiment or preparer of the vegetable soil.—*N. E. Farmer.*

TO DESTOY THE GRAIN FLY.

A gentleman has just communicated to us a method of destroying the grain fly which will cost but a very little, and which he thinks will not only be effectual in saving a crop of grain, but if generally practised by farmers, will rid the country, in a great measure, of this enemy. He observes that he was lately examining a piece of wheat and was surprised in finding only now and then a grain worm in the hull, as they were generally very plenty; he inquired of the farmer the cause, who told him that he had destroyed the flies by carrying pitchwood torches through his grain, commencing in the evening as soon as it began to grow dark, and as early in the season as the flies made their appearance, and continuing the operation till the flies were all destroyed or had fled, which was about six or seven nights. As he passed through the grain, he carried a pole that struck against the tops of the grain, which caused them to fly up into the fire, as is the general practice with insects, when they were either destroyed, or disabled by having their wings burnt off so as to prevent their doing mischief. This farmer said he was induced to try this method as his neighbor last year saved his grain in this manner, while others in the vicinity had theirs greatly injured by the grain worm.

A cheap apparatus can be made for destroying flies in this manner, by which the business can be done with great expedition. Take two long, light poles, and commencing two or three feet from the butt ends, cut them away so as to bring the butt nearly to a point, then splice them together, lapping about as far as they are cut away, and fasten them with nails. In this manner a great length of pole may be had with but little weight, as it is to be carried by the middle. One pole may be used, but it will not be on so good a principle for lightness. We will give another method of making this part of the apparatus, as it may be more convenient for fixing the fires. Take a very long piece of board, straight on one edge, four or five inches wide in the middle, with the other edge cut away straight from the centre to about one inch in width at the ends; let the straight edge of this board be up, and nail on to it another piece, lying flat wise, of the same length, three or four inches wide in the middle, and about one and a half inch wide at the ends. This will be light and strong.

These boards or poles are to be carried so as to strike the tops of the grain and start the flies, and the fires should be a little above the boards so as not to burn the grain. When pitchwood can be had it will be good for fires; pieces can be fitted to small holes bored into the poles or boards; they should be of sufficient length to bring the fire above the wheat. Where pitchwood cannot conveniently be obtained, tar, which is very cheap, may be fixed with tow so as to burn long, and if the light be not bright enough, spirits of turpentine may be added.—The lights should be within two or three feet of each other. A thin piece of board might be elevated ten or twelve inches above the flat piece, before named, and on this might be fastened light vessels for the tar. By proper care in fixing poles or boards, a breadth could be taken through a piece of grain of 20 or 30 feet.

These suggestions as to an apparatus for destroying this great pest of the farmer, may be of advantage to some, others may fix a better contrivance. We regret that we did not hear of this method earlier, that it might have been tried when the flies first made their appearance.—Though the season in which the flies usually do mischief may be passed, yet farmers may judge, in a measure, of the utility of this method by carrying lights through their wheat as soon as it is dark, as there may be some flies remaining. We think that it appears reasonable that the grain fly may be destroyed as here recommended, and the experiments that have been made, so far as we have heard, have been successful. The vast amount of grain destroyed by these insects, should induce every farmer in the country to exert himself to discover a remedy against their ravages, and every method recommended that has any reason to support it, should be fairly tested; and those who make experiments should communicate the result to the public that others may benefit from their experience.

Sheep Worm.

There is a fly that deposites its eggs in the nostrils of sheep, usually in August and September, where it hatches, and then makes its way up into the head and often causes death.—The frequent application of tar to the noses of sheep, is considered the best preventive. Put tar on boards and strew on salt, and the sheep will smear their noses with tar in eating the salt. The following method is recommended by some sheep master. Take a small log, dress it a little upon the upper side, bore holes into it with a large augur at short intervals, about two or three inches deep, fill these holes with salt, and with a brush apply tar as often as once a week around the holes, and give the sheep daily access to the salt. A small quantity of tar frequently given to sheep is considered conducive to their health. Alexander Reed, Esq. of Washington Co. Penn., observes, "we have have long been satisfied that the use of tar as a medicine or condiment for sheep has not been duly appreciated. The cough and foul nose, I am disposed to think, are both produced from the same disease. When we notice them we lose no time in removing them from the flock, *and make a free use of tar.* It rarely fails to effect a cure in a few days, unless the animal is old or unsound."

On Improvement of Wet Meadows.

[*From Transactions of the Essex Agricultural Society.*]

The committee on improving wet meadow and swamp lands, consisting of N. W. Hazen, Asa T. Newhall, and Amos Shelden,

Have received upon the subject referred to them, the two communications which are annexed. Those sufficiensly attest the facility with which such improvements may be made, and the rich benefits which those may expect who undertake to prosecute them judiciously. The committee understood Mr. Dalrymple to state that the average cost of his meadow land, which is that spoken of in his statement, including the price which he paid for it, and all expenses of cultivation for the first crop, would not exceed $25,00 per acre, and it appears, from the interesting narrative which he has furnished, that he obtained for the produce of a single acre in one year, the sum of $100,50.

It is striking to reflect how many thousands have emigrated to the wilds of the west, leaving behind them New England, with all its social advantages, and thousands of *prairies* just like this discovered by Mr. Dalrymple, in the very centre nearly of the populous town of Lynn,—in pursuit of lands that will afford a profitable cultivation: quitting the homes and graves of their fathers with an indifference, which would sometimes seem to indicate that the cold calculations of interest had impaired the force of some of the better feelings of our natures, in pursuit of a cheaper and more fertile soil, which the same enterprise, better directed, would have taught them to find in the "wet meadows and swamp lands" of their own native

farms. Add to the productiveness of Mr. Dalrymple's meadow the value which the high privileges of New England confer upon all the land situate within her borders, and he may safely challenge Illinois, and even the banks of the Red river, for an instance of cultivation equally profitable.

The example afforded by the experiment of Mr. French, is scarcely less valuable to be presented to the farming interest, than that of Mr. Dalrymple. It is upon a smaller scale, and such as a majority of the farms in the county propably afford an opportunity for cultivation. And Mr. French further informs us, the necessary labor was done at intervals afforded by the other business of the farm.

It would not be easy, by any commentary, to add to the impressions which the statements of Messrs Danrymple and French cannot fail to make. They award the highest premium of twenty dollars to Orin Dalrmyple, and the next of ten dollars to Moses French.

N. W. HAZEN, For the Committee.

December, 1837.

The Crops---Grass Hoppers---the Drouth.

Columbus, August 1.—We are cheered from every quarter with information of the abundant harvests which have been made this year in all parts of the country. The wheat harvest has been particularly fine and abundant; and husbandmen in all the wheat growing states, have been blessed with unusually plenty. The hay harvests have also been good, and if the yield of clover and timothy and other grasses has not been as great this season as has been known, the weather has been of the finest for making and securing the crops. The oat crop where it has been gathered is of excellent quality and yield, but we have noticed many fields of late and unripe oats much damaged by grass hoppers. Corn, which in the early part of the season, was backward and unpromising, is now looking unusnally fine, and gives promise of great plenty.

The heat and dryness of June and July, seem to have been peculiarly favorable to all the insect tribes. We find our meadows and fields swarming with innumerable hosts of grass hoppers and other insects, which are doing much damage. Oats, as before observed, are suffering much from this cause, and even corn has been attacked by them. We are beginning too to feel the want of rain very much, it being now several weeks since we have had even a shower. We trust, however, that these causes will operate only as slight drawbacks to a season of unusual plenty and rejoicing.—*Ohio Farmer.*

On Summer Transplanting White Pine.

Mr. Editor—I herewith forward you some account of transplanting of the white pine (in the cemetery now forming at Worcester, Mass.) in the months of June and July, which perhaps may be useful and interesting to some of your readers and more especially to those who are desirous of planting pine around their dwellings, &c. as ornamental trees.

The latter end of June, I removed several trees from 10 to 12 or 15 feet in height, and I have removed several on the same principle, and shall continue so to do perhaps for some time.

The process I follow is simply to cut around the tree with a spade at some distance in such a manner that the top surface can be taken up with the roots entire; holes are then dug larger than the circumference of the roots and soil taken with the tree; the tree is easily taken up with the soil adhering to it, especially if on a pasture or upon soil where there is a plenty of leaves, &c. to cover the roots; the tree is easily taken up with the earth by running a spade underneath the root, when it may be lifted into a wheelbarrow and conveyed to the hole and carefully planted, giving a plenty of water; if very dry weather succeed, it will be proper to water occasionally, and by this process I have succeeded admirably, and believe others may do the same in planting the pine in summer. It will be best if possible to plant after a shower of rain, as the earth is better prepared then for the tree, &c.

I do not pretend to point this system out as *new*, for I am well aware there are many persons acquainted with planting evergreens at this season, but I hope, if it is practised, which I have reason to believe it will be by many, it will be found to answer a good purpose in removing the pine, hemlock, spruce, and many kinds of evergreens.

Yours, E. Sayers.

New England Farmer.

The Silk Business, although still the subject of much scepticism, will undoubtedly succeed in this country. People cavil about it as they do about all other new enterprises, but experiments made by intelligent farmers, have amply tested the truth of this prediction. Four or five years since, such a thing as American silk was unknown, except limited quantities made in Mansfield. It is now to be found in all our markets and of superior quality. More recently, public attention has been attracted to the subject, and the business, in all its ramifications, has undergone a scrutinizing investigation. Various experiments have been made with Mulberry trees to test their relative goodness for feeding the worms and ability to endure the climate. The plants introduced from China and Italy promise to increase the amount of foliage fourfold over the native tree. The method of feeding the worms and the winding of the silk from the cocoon with the aid of simple and unexpensive machinery, has also tended to simplify the business. Of course, its prosecution by the Farmers is rendered less hazardous and expensive.

To say nothing, then, of the incorporated companies, both for growing the raw material and manufacturing it into silk, which are rising up in the middle states as well as in New England, it will be found upon inquiry, that the farmers themselves are extensively engaged in raising cocoons and the raw silk. As a legitimate branch of their business, perhaps none can be prosecuted with more safety or which will ensure a better income. This fact has impressed many agriculturists in Massachusetts, and like their neighbors in Connecticut, only with the new improvements which have been introduced in advance of them, they are extensively cultivating the Mulberry. Many have already planted large numbers of trees, and either are feeding, or are preparing to feed, the worms and raise the raw material. To the farmer the expense must be comparatively small, after the trees are once out, and the feeding is usually accomplished in six weeks and mainly by children. The cocoons and the raw silk find a ready market in Northampton, and as the quantity yet raised is small compared with the consumption, both of them are *cash articles.*

We know of no one crop involving so little labor and such a small amount of capital, where the profits are any thing like those resulting from raising raw silk, in connexion with other agricultural avocations. The labors of Mr. Timothy Smith of Amherst and many others in this county, who are engaged in the business, we are satisfied, when the results are published in the autumn, will most amply verify this prediction. The bounty paid by the state has given an impulse to the business. But the more the silk culture is divested of complexity and the public mind is informed of its simple and lucrative mode of being produced, the more extensively will this article be found among the annual productions of the farmer.

The young plantations of foreign mulberry trees in this town are as extensive as they are beautiful. Those belonging to the silk corporation are most numerous; but Dr. Stebbins, Mr Rodgers, and Samuel and Thomas Whitmarsh, are among those here who are cultivating the greatest variety of trees, and whose fields furnish the largest number of thousands of plants. Some apprehend there has been a great deal of *moonshine* about the business. Men ardent in the pursuit, and sanguine in their statements, doubtless have made it somewhat so. But as this disappears and the fog evaporates, beneath it will be found a fertile, beautiful country, waving with the foliage of the mulberry, while the testimony of *experience* will be cheerfully awarded to the lucrative character of the *silk business.* This is our sober, dispassionate conclusion. —*Northampton Courier.*

Best Time for Cutting Timber.

For many years my attention has been turned to ascertain the proper time to cut timber to insure its greatest durability. I am satisfied that the spring, when the sap flows freely, is the best time to fall timber. I am borne out in this opinion by the following statements that I have collected.

J—— C—— informed me that a detachment of British troops crossed from Philadelphia the 1st day of May, in 1777, and on the 2d commenced cutting down his woods for the supply of the army, and at the same time to burn up his fencing, which they completely accomplished. "But," said he, "they taught me the proper time to cut timber to make it last. After they marched off, I found many trees that were not cut into cord wood; those I split into rails, believing, at the same time, they would soon decay, from their being cut in the spring—but I have been agreeably disappointed,—most of them are as sound now as when made into fence." This he related five-and-twenty or thirty years after the peace of '83.

Conversing with an old gentleman in the nighborhood of Haddonfield, he told me that in the spring of the year he was making fence. "My fences," said he, "are all of ceder, but falling short of cedar rails, and having none from the swamp, I was induced to cut down a pine tree and convert it into rails to finish out my fence; they were the only pine rails I ever made use of. Ten or twelve years after this, when resetting my fence, I found the pine rails so sound that I let them remain; since then I have not seen them, having left my farm." I proposed taking a ride and look if any of them were remaining. We did so, and found a number in the fence perfectly sound. I asked how long they had been there. He replied, between 28 to 30 years.

An old friend related the following:—"I served my apprenticeship to a carpenter. During my apprenticeship my employer was sent for to build a barn for a farmer in the neighborhood, who was very particular to have every thing done in the best manner. In the old of the moon, in the month of February, he cut down and hauled all the logs necessary for the frame. In the spring my employer was sent for, and when we came to hew the sills, one was so defective we were compelled to get another from the woods to supply its place. Whilst we were building the barn he would frequently lament the loss of the sill he cut in the winter, saying, 'in a few years I shall have to put in a new sill, for this one will rot,' pointing to the one cut in the spring. But, said this old friend, I lived to see the same barn moved, and before it could be effected, they were compelled to put three new sill under it; they were all rotten except the one cut in the spring." This satisfied me that the spring was the proper time to fall timber to insure its lasting well.

Being at Egg Harbor, fitting out a vessel, and in company with several persons, the conversation turned as to the proper time to cut timber for ship building—an old man related the following:—I well remember a gentleman coming from Philadelphia to Egg Harbor, and sending for a ship-carpenter to build him a schooner. When they entered into a contract, the gentleman bound him up to cut down all the timber when the sap run, and then take his own time to build her, provided he would get her round to Philadelphia before the winter set in. We all thought he knew but little about cutting timber, and would soon have a rotten vessel. Eighteen years after, said he, I saw the same vessel opened. Her timbers were then sound, and in good condition.

Yours, &c. An Old Man.

Farmers' Cabinet.

KENTUCKY.

We have lately performed a jaunt of sixty miles through the grazing district. It is enough to make one justly proud of his native state, to look upon the beautiful, the splendid, the glorious pastures of Kentucky. And then the numerous and large herds of cattle, horses, mules, sheep and hogs—it is almost incredible to see to what perfection many of our farmers have arrived in the breeding and management of these domestic animals. No country on earth—no, not even old England—can excel Kentucky in an exhibition of fine stock. It is perfectly animating to the lover of good husbandry, to witness the improvements which have been effected in almost every department of agricultural industry.

The harvests have generally resulted very favorably.

The wheat crop is uncommonly good.

The rye crop on many farms, is very heavy; but on a good many which promised unusually well the fore part of the season, we regret to say, the expectations of the farmers were not realized. The bud-worm destroyed some entire crops; and a greater number fell far short of the anticipated yield, in consequence of the grain not filling out. In most instances, where this unfavorable result occurred, we believe the stalks and heads were unusually large.

The oat crop is much better generally, than we have had for several years.

The clover and timothy meadows have yielded fair products, but we cannot say that the latter has yielded quite a satisfactory result. The grasshoppers are becoming a formidable foe to the timothy meadows. In several meadows, we have observed that almost every blade has been stripped by them, leaving nothing but the head and the coarse hard stalk. This is a serious evil; and there are those who believe we shall be compelled to abandon timothy for hay and substitute other grasses not attacked by the destructive jaws of this pestiferous little enemy.

The corn crop, which, owing to the unusual coolness of the spring, was backward till the early part of June, is exceedingly promising—indeed we think we never saw it more so—and on the whole, there is every indication favoring the belief, that the labors of the hushandman will be crowned this year, with abundant and grateful success. Thanks and thanksgiving to the gracious Ruler of the seasons.—*Franklin Farmer.*

WHITE-WASHING TREES.

Though it has frequently been stated in agricultural papers for several years that the white-washing of fruit and ornamental trees is injurious, as appears by experiments, yet it is practised by many. It was doubtless done in the first place for the purpose of destroying insects and rendering the bark smooth, by some means or other many persons have got the opinion that white-washing trees promotes the health and growth of trees. Caustic lime applied to trees acts as a powerful stimulus, produces a sickly state in the vegetable system, and soon brings on the appearance of premature old age.

It is evident to any reflecting person that a close coat of any matter upon the body of a tree will have an injurious effect; one might as well put a coat of varnish upon the skin of an animal in order to promote its growth, as to put a coat of lime, or any other matter. upon the body of a tree. There is an analogy between the *cuticle* or outer skin of an animal, and the *epidermis* or outer bark of a tree; they serve as a protection from external injury and they regulate absorption and perspiration through their pores.

When trees are infested with lice or other insects, they should be washed with soap suds; and when the bark becomes very thick and the outer part becomes rough and loose, it should be carefully scraped off, and so should moss when it has accumulated upon trees, and then the trees should be well washed in suds, and scrubbed hard with an old broom or stiff brush. The studs will run down around the roots of the tree, and make an excellent manure.

Since we wrote the above, we have the Genesee Farmer containing an article on this subject, in which the editor expresses a doubt as to the propriety in the late disuse of white-washing trees, as lime is useful in removing moss, cleansing the bark and destroying insects; but he disapproves of putting on enough to form a coat, that will exclude from the bark the action of the air and moisture. —He remarks that trees in nurseries that were washed in lye or white-wash grew more vigorously than those not subjected to the process.

A lye of wood ashes or water in which pearlash if dissolved, which is the same substance, will doubtless be as effectual in destroying moss, lice, &c. as lime; they are both alkalies, and will have similar beneficial effects; but as to injurious effects, none will probably be produced from the lye as it is a vegetable substance, and so far as it is imbibed by the bark and taken into the the circulation it will promote the growth of the tree; but as lime is a mineral substance, we think that so far as it is imbibed by the bark and enters into the circulation, it will be injurious, though at first it may act as a powerful stimulus, and appear to produce beneficial effects as to the thrift of the tree.

Those who have made experiments in white-washing trees, or in the use of other washes, will confer a favor on the public by furnishing us with any useful information on the subject.

Cure or Prevention of Murrain.

The Cultivator publishes a correspondence on the subject of this fatal disease in cattle, in which a Maryland farmer recommends tar as an efficacious cure and more perfect preventative. As a simple, cheap, and safe prescription, it deserves attention and farther experiment to test its efficacy. The mode of administering it is as follows:

"I tie my cow in the stable, then let a strong man hold her by the nose and horn, then take the paddle we commonly use for greasing the wagon, dip it in the tar bucket, taking up as much as will stick to it, say from a gill to half a pint, open the cow's mouth, and put it as far back on her throat as possible without hurting her; hold the puddle in her mouth long enough for her to work the tar off of it. I do the same to every cow, and repeat the operation every two or three weeks the year through, at the same time rubbing a quantity of tar about the cow's horns and face, forhead and nose; likewise smear plenty of tar about the mangers and troughs. Before I commenced with the above remedy, I lost a number of my best cows, but we called the disease the horn distemper or murrain. I have had cows taken when in fine order, I might say almost fat enough for beef, they would linger a few days and die—the horns when examined would always be hollow, and mostly dry—urine sometimes bloody, It is a distemper sometimes caused by cows drinking impure water. I would advise you to try it, always bearing in mind that it is necessary for the cow to swallow a good portion of the tar. Since I have used the tar, about two years, I have not had one of my cows diseased in any way, and one of my neighbors, whose cows were formerly diseased, has used it for a long time with the most complete success. I give the tar to horses, sheep and hogs, and think it good for them."

SUMMER FALLOWING.

This is one of the most important branches of good farming, and upon which has arisen a great variety of opinion and practice. Some farmers are of opinion, that the ploughing for a summer fallow cannot be too frequent, and that all fallow crops are injurious to the land and particularly to the succeeding crops. Others consider all naked fallows as a waste of expense without any adequate benefit, and insist upon some fallow crops, either of turneps, to be fed off by sheep, or of potatoes, to be dug for stock, or of buckwheat, or clover, to be ploughed in as a fertilizing crop. Both probably are in error, and run into the opposite extremes. A strong, stiff clay, or a hard gravelly soil, cannot be ploughed too often for a fallow; but a loose sandy soil may be greatly injured by too frequent ploughings. The latter may be tilled to advantage, with a potatoe fallow; and the former by a turnep fallow, to be fed off by sheep; or after several ploughings, with the fertilizing fallows of buckwheat ploughed in; but a rough stony soil cannot be tilled with a fallow crop to advantage; this land and perhaps this only, requires a naked summer fallow. The great advantages to be derived from a summer fallow, are these:

1. Frequent ploughings destroy the herbage upon the fallows, and the roots and seeds of herbage, and thus render the grounds clean for the following crops.

2. This is greatly promoted by a potatoe fallow, both in hoeing and digging.

3. The plough renders the earth light and mellow, to receive the seed when sown, and to admit the extension of the roots of the grain, when it vegetates.

4. At each ploughing it changes the soil, and exposes a new surface to receive the benefits of the sun, air, rains and dews, with their fertilizing powers.

5. It renders the earth light and pervious for the admission of the sun, air, rain and dews, and opens a free circulation for them to the roots of the grain, (or plants, whatever) and thus they impart their fertilizing properties to the vital principles of the crop you cultivate.

6. The green fallow, when ploughed in, as well as the potatoe fallow, greatly promote this benefit by meliorating the soil. Upon this principle, the plough, with the fertilizing crops, upon a summer fallow, are the only substitute for manure, under tillage, because the effects are the same, with this exception, that the meliorating effects arising from the fermentation of strong manures, are both greater for the time and more permanent and lasting. The manure, also, will continue to assist the plough in meliorating the soil for after crops, by causing a new fermentation upon every new exposure of the surface to the air, until the strength of the manure is wholly exhausted. Hence, again, the value of your potatoe fallow, to increase your number of stock, and quantity of manure.

HINTS FOR THE PREVENTIOM OF DISORDERS IN HORSES.

Chiefly taken from Messrs Clarke and White's valuable Treaties on Horsec.

STABLES.

Stables should be lofty, light, and airy, and should never contain more than six or eight horses. They are in general kept too close and hot.

Too much clothing also is usually put upon the horses, which thus become so tender, that they catch cold upon every slight exposure to a cool air.

The doors and windows of stables should be thrown open when the horses are out, but care must be taken that a cold current of air does not immediately blow upon them when in the stable, particularly if they are heated.

It is a bad practice to allow horses to stand upon litter in the day time, except they are unwell or fatigued.

FOOD.

The quantity and quality of a horse's food should invariably be regulated by the exercise and fatigue he has to undergo; high feeding, with proportionate work, produces half the disorders to which horses are subject.

Good hay is of much consequence to horses engaged in active exercises; but it should be given in small quantities during the day; and when, owing to bad weather, the horses cannot be exercised, they should be stinted both in their hay and corn; and a bundle or two of clean wheat straw may be put before them. All grain given to horses, would be more nutritive if bruised in a mill and mixed occasionally with chopped straw. Carrots are a most wholesome food, and of all roots, rank next to corn in point of nourishment. They are particularly serviceable when a horse's wind is affected.

When horses are first taken from grass they should be gradually brought to a dry diet by giving them carrots, lucerne, bran mashes. &c. with their hay. After a few days a small quantity of oats may be given, and the feed increased by degrees till they come to their full allowance. They should likewise be put into a cool stable, and have plenty of walking exercise. If such precautions were attended to, a great saving might be made, both of physic, and the horse's constitution.

WATER.

Pond water, if it lie on a clay bottom and be sweet, agrees best with horses; hard water may be improved by throwing some chalk or clay into it, and exposing it in cisterns to the open air.

It is proper to let the water, intended for the horses, stand for some hours in pails in the stables before it is used.

Water should be offered to horses frequently; they would then never drink large quantities of it at a time, which is particularly hurtful to them when heated by exercise. It is a good and safe plan when travelling, &c. always to mix hot water enough with their cold to take off the chill.

EXERCISE.

A horse's exercise should be proportioned to his strength, manner of feeding, and the labor required of him. He ought, however, to have at least two hours of daily exercise.

Horses should not be ridden fast after having been newly fed and watered. A fat horse requires a long course of moderate exercise, before he can safely be put to trot, which is violent.

It should be a general rule to ride a horse slowly at the beninning of a stage; afterwards increase the pace, and slacken it again a mile or two before the end of it, so as to bring him tolerably cool into the stable.

If horses come in very warm, they should be walked about gradually till cool, their feet should then be picked, and all dirt and gravel carefully washed out. In hot weather, washing their legs is proper, but they should always be well rubbed afterwards. In winter, cold water is injurious to the heels, and apt to bring on swelling and the grease.

Horses should on no account be permitted to stand uncovered in the stable, much less at the stable doors after being much heated, except the weather be very warm. Road horses should in the middle of a long stage have half a pail of water mixed with a little oatmeal; and on a journey, if no other corn but what is soft and new can be procured, oatmeal just moistened with water or some coarse bread, should be given in preference to such corn, which is extremely unwholesome. If a horse grow costive, let him have some mashes of scalded bran or malt. If he have any difficulty in staleing only, an ounce of nitre may be given in his food for a few nights.

Should he be seized with a violent fit of the gripes, let him be bled, back-raked, and have a glyster of three or four quarts of water gruel mixed with eight ounces of glauber or common salt.

The best instrument for giving a glyster is an ox bladder, that will hold two or three quarts, tied to the end of a wooden pipe about fourteen inches long, one inch and a half diameter where the bag is tied, and of a gradual taper to the extremity, where the thickness should suddenly increase, and be rounded off at the point, and made as smooth as possible The hole through the pipe may be made sufficiently large to admit the end of a common funnel for pouring the liquor into the bag; no other force is requisite to throw it up, than the holding the bag a little higher than the level of the pipe. If in consequence of violent inflammation and pain, and opiates should be necessary, a table spoonful of laudanum may be given in a pint of water.

Should a horse be touched in his wind, be very careful that he has only moderate quantities of food and water at a time. Two spoonfuls of tar mixed with the yolk of an egg given in a morning fasting will be of great service to him when travelling. In hot dry weather, it is useful to stop horse's feet at night with a mixture of soft clay and cow dung, and to moisten them frequently with water.

FRICTION.

The currying, brashing, and rubbing down horses is of great importance, not only to their coats, but also to their general health: when these operations are neglected, or slightly performed, an obstruction takes places in the pores of the skin producing mange, &c. and the hair instead of being smooth and shining, stares, and stands on end. Nothing tends so much to prevent grease and swelling of the legs, as frequent hard rubbing and carefully cleaning the heels.

TRIMMING.

The ears of horses are covered with a short down in the inside, mixed with larger hairs, to prevent cold air, rain, dust and flies from hunting the internal ear. The trimming therefore this part, is very prejudicial to the horse.

From the New York American.

New System of Education.

In the last message from De Witt Clinton to the Legislature of New York, he remarked, that with a proper system of education, and correct modes of teaching, all our children might become familiar with the physical sciences, botany, mineralogy, the various classes of animals, chemistry, natural philosophy, astronomy, the fundamental principles of agricultural and political economy, and with much in history and biography, without any additional expense of time or money for their instruction. The soundness and truth of this remark has since been fully proved by the system of education in Prussia and other German States: as it has by schools for deaf mutes and the blind in this country.

The following facts also show that the same remark may be fully sustained as a plain deduction of reasoning:

1. Spelling books, in common use, contain from ten to fifteen thousand words. To learn the orthography of each word by the dint of memory, founded on the arrangement or relative position of the letters, must require as much time and efforts as to learn the names, properties, and uses of ten plants, minerals, animals, or shells; or ten principles in chemistry, natural philosophy, astronomy, agriculture, or political economy; or the same number of facts in history or biography. Consequently while a child is committing to memory the words in a spelling book, he might learn a hundred thousand of the objects, principles, or facts above referred to

2. The time, paper, ink and quills, ordinarily used by children in school, in *copy writing*, would be sufficient for writing the names, with brief descriptions of the same objects, principles, and facts.

3. The time spent in repeating lessons from reading books, if devoted to the reading and study of the Bible, works on science, history, &c. would be sufficient for

examining with some care, and for some *critical reading* of, at least one author, on each of the subjects above mentioned.

4. The time usually spent in *memorizing* grammar lessons, would be sufficient for practical and critical exercises in description and narrations. relating to the objects of nature and art, with scenery, operations, and events, witnessed by children during the period of their school days and years.

5. By this practical, rational, and consequently interesting, course of exercises in spelling, writing, reading and grammer, it must be evident to every one, that children would become more familiarly and thoroughly acquainted with these mechanical parts of education, than they could possibly be by a mere repetition of them for days, months and years, like so many parrots, without any knowledge of their meaning, sense, or use.

In proof of the correctness of the above statements, I beg leave to mention that I have had occasion to know many thousand children who have learnt the names, and something of the properties, of from twenty to thirty objects in one hour, many of whom had probably spent, not only days and weeks, but months, if not years, in learning the twenty-six letters of the alphabet; and after all, they probably did not obtain *one* distinct rational idea, from what was considered their instruction, though. it is true, they must have received many from their sports, and from their walks to and from school.

To secure the important objects specified by the distinguished statesman and philosopeer above named, and now realized by the subjects of some absolute monarchs, the following provisions are desirable, perhaps essential;

1. Encouragement and aid to children in studying the volume of nature, with which all are delighted, and which they commence reading when they first open their eyes upon the light of heaven.

2. Assistance in collecting, arranging, and *exchanging with others*, specimens of minerals, plants, shells, drawings, mechanism, needlework, &c. &c. for the contents of "FAMILY CABINETS."

3. The formation of "SCHOOL CABINETS" in all the seventy thousand schools in our country, and exchanges with each other in works of Nature and Art.

4. The early and daily use of slates for drawing objects of Nature and Art, such as the simple figures of geometry, viz: triangles, squares, hexagons, and circles; horses, dogs, birds, fishes, and insects; hatchets, knives, shovels, ploughs, &c.

5. Writing words, or names of things, as dog, cat, hat, oak, rose, mica, lime, slate, &c., in connection with the things themselves, or pictures of them drawn by the children.

Following the pictures and names of objects, brief and familiar descriptions of them, first on slates, and then on paper, by lead pencils, followed by pens.

6. Simple instruments for visible illustrations, both in families and schools, viz: a globe, geometrical solids, levers, pullies, screws, maps, and other drawings or prints, &c, &c.

7. Frequent walks in the fields and gardens, over ledges or mountains, by rivulets or brooks. through markets, on wharves, in mechanics' shops, marble and granite yards, aided and encouraged by the presence and instruction of a teacher, parent, older brother or sister, or some other protector.

8. Small, simple and familiar books, describing the objects, principles or operations they have witnessed by their lessons in the book of Nature, With these, some of the beautiful and interesting passages from the Bible, selected from the Gospels, the Psalms, Proverbs, or the historical sketches of the Old Testament, are peculiarly appropriate and delightful to children.

9 Larger and more systematic works on the sciences, arts, history, biography, and the Bible more fully, with abstracts, reflections, or drawings of the things and incidents, learnt from first elements of mature study.

10. Releasing children, principally or entirely, from the incongruous, unmeaning and irksome masses, found in spelling books, reading books and grammars, now consuming the greatest part of the precious time of children allotted to their education.

As a course of juvenile instruction, similar to that here pointed out, must commend itself to the common sense of every one, and as it is fully tried and corroborated by experiments, both in Europe and America, it is, at least, worthy of trial by every parent and teacher in our Republican nation I remain, as ever, sincerely yours,

J. HOLBROOK.

SEED WHEAT.—It is of the greatest importance to save the best seed in order to prevent a depreciation in grain and make improvements if possible. Every farmer should examine his wheat before harvesting, and if a part of it is superior to the rest he should keep that by itself for seed, and when he threshes it he should beat the bundles over a cask or box, so as to get out the large heavy kernels only and save them for seed. In this way seed may be improved with very little trouble. A further improvement may be made by using a sieve that will allow the small grains to pass through and retain the large for seed.

Chinese Morus Multicaulis, &c.

600,000 SPLENDID TREES of the genuine Morus Multicaulis, being the most extensive collection in the Union, are now offered for sale, deliverable as soon as the season will allow. These trees will be of fine size, and the wood here attains a degree of maturity and development, calculated to ensure success. The prices will be lower than they can be obtained elsewhere in the United States; and priced catalogues of these, and of all Fruit and Ornamental Trees and Plants, Green-house Plants, Bulbous Flower Roots, spendid new Dahlias, and Garden, Agricultural and Flower Seeds will be sent to every one who applies for them, by mail or otherwise.

Also for sale, 30,000 Morus Expansa, a most unrivaled variety for northern latitudes, being very hardy, and producing very large leaves and the finest silk; of this variety, there are no trees for sale in the Union, except this parcel; 50,000 Dandolo, called "Chinese" at Northampton; 15,000 Rose of Lumbardy; 12,000 Pyramidalis; 25,000 Brussa, mostly of large size; 50,000 Canton, and several other varieties of Mulberry.

Also, now offered for the first time, 25,000 of the new Hybrid Multicaulis varieties, originated from seed, with very large leaves, much resembling the parent, and forming roots from layers and cuttings with equal rapidity, being very hardy.

The greater part of these trees are of larger size than are usually sold; and the Morus Expansa Trees are three to nine feet high, suitable for producing immediately immense crops of leaves.

Twenty pounds of Silk Worm Eggs, of the largest white two crop and straw colored species.

Garden Seeds will be supplied by the pound or bushel; besides which they will be supplied to any extent put up in assorted boxes, and neatly labelled, suitable for retailing, at $6 per 100 papers, and 25 per cent discount to venders, and 6 months credit.

WILLIAM PRINCE & SON,
Proprietors of the Linnæn Gardens & Nurseries.
Flushing, Aug. 4, 1838.–2t.

SAXONY SHEEP FOR SALE.

40 RAMS & 60 Ewes of the pure Electoral Saxon Race. The subscriber imported 100 yearling Ewes and a number of Rams in 1827 which were selected by himself from the purest race in Saxony, and with which he commenced his flock, and not only mantained them in all their purity of blood, but improved them in size, symmetry of form, and quantity and quality of wool. The above number of Ewes will either be sold or let for a term of years, and can be increased to 75 or 80 if desired.

H. D. GROVE,
Buskirks Bridge Post Office, Washington Co. N.Y.
August 25, 1538–3m*

Silk Business.

PERSONS who intend doing an extensive business next year with the Mulberries, can be supplied with the *true genuine Morus multicaulis* trees and cuttings, by sending in their orders early. Companies that wish to contract for large quantities, can be supplied on reasonable terms. The trees are to be well packed, so as to be sent to any part of the United States, and delivered this fall. The subscriber has been extensively engaged in the culture of silk for some years, particularly to the production of the Morus multicaulis; and will be hapyy to give any information respecting the tree or feeding the worm that may be required—silk, worm eggs, &c.

All letters will meet with immediate attention if assingned to EDWARD H. ARNOLD.
Burlington, New Jersey.

N. B. As orders are coming in now, it would be well for those in want to apply early. Aug. 1838.–3m*

Red Clover Seed,

A FEW bushels just received, for sale by
June 23. REYNOLDS & BATEHAM.

Morus Multicaulis.

THE subscribers are prepared to furnish Chinese Mulberry, or Morus multicaulis trees, in large or small quantities, delivered any time this fall after the first of October, or they will contract them delivered in the spring.

The trees were raised in this climate from layers, are from two to three feet high, of thrifty growth and matured wood, and will be sold at the lowest prices, in proportion to their size.

October and November are the most favorable months to transport them to the Western states or into Canada, or in any direction where they must be sent a distance by water communication.

Applications for Trees may be made at the Green House on Sophia-street, where they will be kept, or at the Seed Store in the Arcade; and orders from a distance, by mail, should be sent early, addressed to

REYNOLDS & BATEHAM.
July 28, 1838. *Rochester, N. Y.*

Imported Sheep for Sale.

TO be sold, ten Leicester Bucks. These animals were selected from some of the best flocks in England, and imported last year by their present owner. Also, an imported Devon Bull. Apply to

JOHN COWLEN,
Aug. 4, 1838.–3t *Truxton, Cortland Co., N. Y.*

New Arrival of Turnep Seeds.

WE have just received from England a large additiona supply of TURNEP SEEDS, among which are the following kinds:

Ruta Baga, or Yellow Swedish,
Dale's Yellow Hybrid,
Yellow Bullock, Yellow Scotch,
Yellow Aberdeen, Red Round,
White Globe or Flat,
White Norfolk, Long Tankard,
Early White Flat Dutch,
White Stone, Yellow Stone,
Yellow Malta, Yellow Dutch.

☞ See descriptive list on page 198, current vol. Genesee Farmer. REYNOLDS & BATEHAM.
Rochester Seed Store, June 23, 1838.

Farmers' Books.

NOTICES on the Sugar Beet, containing a description of the culture and preservation of the plant; also explanations of the process of extracting its Sugar. Price 25 cts.

A Manual of the art of making and refining sugar from Beets. Price 75 cents.

Cobb's Manual on the Culture of Silk.
Chaptal's Agricultural Chemistry.
The Complete Farmer, by Fessenden.
Fessenden's American Gardener.
A Guide to Orchardists.
Smith's Treatise on the Honey Bee.
A Treatise on Cattle.
Mason's Farriery.
Barnum's American Farriery.
Vols. 1st and 4th, Genesee Farmer, bound.

For sale by D HOYT,
Rochester, May 26, 1838. Bookseller, 6 State st.

Fruit Trees for Sale.

THE subscriber respectfully informs his friends and the public, that he has for sale at his Nurserv in Rochester, Monroe county, state of New-York, a large quantity of Fruit Trees, grafted and inoculated with the most approved kinds, now fit for transplanting, which he will sell on the most reasonable terms. SAMUEL MOULSON.
April 15, 1838.

N. B. CASH will be paid for a few thousand two years old APPLE TREES.

Monroe Horticultural Garden & Nurseries, Greece, Monroe County, N. Y.

THIS establishment now comprises over 20 acres, covered compactly with Trees and Plants in the different stages of their growth.

The subscriber offers to the public a choice selection of Fruit Trees, of French, German, English and American varieties, consisting of Apples, Pears, Plums, Peaches, Cherries, Apricots, Nectarines, Quinces, Currants, Gooseberries, Raspberries, Grape Vines, Strawberries, Ornamental Trees, Shrubs, Plants, Hardy Roses, Vines, Creepers, Herbaceous Perennial Plants, Bulbous Roots, Splendid Pæonies, Double Dahlias, &c. &c.

Also, a large collection of Green House Plants, of choice and select varieties, in good condition.

Orders respectfully solicited. Trees and Plants, when ordered, are carefully selected and faithfully packed, and if desired, delivered on the Canal, one mile from the Nursery, or at Rochester.

Orders for Mr. Rowe's Nursery received by the publisher of this paper.

Catalogues will be sent to every applicant, gratis, or may be had by calling at the office of the Genesee Farmer.

April 1, 1838. ASA ROWE.

ELECTION NOTICE.—*Sheriff's Office, Monroe County, Rochester, July* 19*th*, 1838.—A general election is to be held in the county of Monroe, on the 5th, 6th and 7th days of November next, at which will be chosen the officers mentioned in the notice from the Secretary of State, of which a copy is annexed.

DARIUS PERRIN, *Sheriff.*

State of New-York, Secretary's Office, Albany, July 16*th*, 1838.—SIR: I hereby give you notice, that at the next General Election in this State, to be held on the 5th, 6th and 7th days of November next, a Governor and Lieutenant Governor are to be elected.

I also give you notice, that a Senator is to be chosen in the Eighth Senate District, in the place of Isaac Lacy, whose term of office will expire on the last day of December. JOHN A DIX, *Secretary of State.*
To the Sheriff of Monroe county.

N. B. The Inspectors of Election in the several towns in your county, will give notice of the Election of a Representative to Congress from the 28th Congressional District. They will also give notice of the Election of Members of Assembly, and for filling any vacancies in county officers which may exist. July 28, 1838.